

**Listing of Claims:**

This listing of claims reflects all claim amendments and replaces all prior versions, and listings, of claims in the application. Material to be inserted in amended claims is in **bold and underline**, and material to be deleted is in ~~strikeout~~ and (if the deletion is of five or fewer consecutive characters or would be difficult to see) in double brackets [[ ]]. In brief, claims 3, 23, and 24 have been canceled, without prejudice, and claims 1, 2, 5, 7-10, 12, 13, 19, 20, 22, 25, 27, 29, 30, 32-34, 38, and 40 have been amended. Applicants reserve their right to pursue the canceled claims and/or the original versions of the amended claims at a later time.

1. (Currently Amended) A bone plate for fusing at least two bones of a hand or foot, comprising:

(A) a body portion having a convex, ~~at least substantially hemi-spherical~~ bone-facing surface corresponding at least substantially to a portion of a sphere; and

(B) at least two openings defined by the body portion, the openings being configured to receive bone fasteners screws that attach the plate to each of the at least two bones ~~and pull the bones together~~.

2. (Currently Amended) The bone plate of claim 1, the body portion defining at least three openings, wherein the openings are configured to receive bone fasteners screws that attach the plate to each of at least three bones and pull the bones together.

3. (Canceled)

4. (Original) The bone plate of claim 1, wherein the bone plate is formed of a biocompatible material.

5. (Currently Amended) The bone plate of claim 1, the body portion defining a central axis, the openings being oriented so that the bones are compressed generally toward the central axis when the bone fasteners screws attach the plate to the bones.

6. (Original) The bone plate of claim 1, wherein the body portion includes a central region and a projection disposed at the central region and projecting from the bone-facing surface.

7. (Currently Amended) The bone plate of claim 6, wherein the projection [[pest]] is configured to be removable from the body portion.

8. (Currently Amended) A method of fusing at least two bones, comprising:

selecting a bone plate according to claim 1;

forming a recess in the at least two bones capable of receiving the bone plate;

positioning the bone plate in the recess, such that the bone-facing surface of the body portion bone plate adjoins the at least two bones; and

attaching joining the bone plate to the at least two bones using bone fasteners screws.

9. (Currently Amended) A bone plate for fusing at least two bones of a hand or foot, the at least two bones defining a recess and a hole that extends into bone from the recess, the bone plate comprising:

(A) a body portion configured to be received at least substantially in the recess, the body portion including a central region and an outer region at least partially surrounding the central region, the outer region including a convex bone-facing surface;

(B) at least two openings disposed in the outer region of the body portion, the

openings being configured to receive bone fasteners screws that attach the bone plate to the at least two bones; and

(C) a projection extending from the central region of the body portion, beyond the bone-facing surface, the projection being configured to be received in the hole, thereby restricting movement of the body portion.

10. (Currently Amended) The bone plate of claim 9, wherein the openings further are configured such that the bone fasteners screws pull the bones generally toward the central region.

11. (Original) The bone plate of claim 9, wherein the projection is configured to restrict movement of the body portion tangential to the bone-facing surface of the outer region.

12. (Currently Amended) The bone plate of claim 9, wherein the body portion and the projection each define a central axis, and wherein the central axes are at least substantially aligned.

13. (Currently Amended) The bone plate of claim 9, wherein the bone-facing surface of the outer region substantially corresponds to at least a portion of a sphere or to at least a portion of a cone is one of at least substantially hemispherical and at least substantially conical.

14. (Original) The bone plate of claim 9, wherein the projection comprises a separate component that is removable from the body portion.

15. (Original) The bone plate of claim 9, the central region of the body portion defining an aperture, wherein the projection is configured to be attached to the body portion at the aperture.

16. (Original) The bone plate of claim 9, wherein the projection and the body portion are configured for threadable engagement.

17. (Original) The bone plate of claim 9, wherein the projection is formed unitarily with the body portion.

18. (Original) The bone plate of claim 9, the body portion further including a perimeter and a bone-opposing surface that opposes the bone-facing surface, wherein the thickness of the perimeter is greater than the average thickness of the body portion measured between the bone-facing and bone-opposing surfaces.

19. (Currently Amended) A method of fusing at least two bones, comprising:

selecting a bone plate according to claim 9;

forming a recess in at least one of the at least two bones capable of receiving the body portion of the bone plate;

forming a hole in at least one of the at least two bones capable of receiving the projection of the bone plate;

positioning the bone plate in the recess and the hole, such that the bone-facing surface of the body portion and the projection both adjoin the at least two bones; and

attaching joining the bone plate to the at least two bones using bone fasteners screws.

20. (Currently Amended) A bone plate for fusing at least two bones of a hand or foot, comprising:

(A) a body portion defining a central axis and having a convex bone-facing surface; and

(B) at least two openings defined by the body portion, the openings being configured to receive bone fasteners screws that attach the plate to each of the at least two bones and pull the bones together generally toward the central axis, at

least one of the openings being a slot, such that a bone fastener may be placed at multiple positions within the at least one opening.

21. (Original) The bone plate of claim 20, wherein the slot is arcuate when viewed generally normal to the slot.

22. (Currently Amended) The bone plate of claim 20, the body portion having a perimeter, wherein the slot extends partially around the central axis ~~and generally parallel to the perimeter.~~

23. (Canceled)

24. (Canceled)

25. (Currently Amended) The bone plate of claim 20, there being at least three openings defined by the body portion, wherein at least one of the openings is at least substantially circular, and at least another two of the openings are slots.

26. (Original) The bone plate of claim 25, the at least two bones being at least three bones, wherein the at least three openings are disposed so that the plate can be fastened first to one of the bones using the circular opening, and next to at least two other bones at variable positions using the slots.

27. (Currently Amended) The bone plate of claim 20, the body portion defining an edge of the slot, wherein the edge is scalloped to form plural discrete sites, each of the discrete sites being configured to receive one bone fastener screw.

28. (Original) The bone plate of claim 27, wherein the edge defines a counterbore for each of the discrete sites.

29. (Currently Amended) The bone plate of claim 20, the body portion defining at least three openings, wherein the openings are configured to receive

bone fasteners screws that attach the plate to each of at least three bones and pull the bones together generally toward the central axis.

30. (Currently Amended) The bone plate of claim 20, wherein the bone-facing surface substantially corresponds to at least a portion of a sphere or to at least a portion of a cone is one of at least substantially hemi-spherical and at least substantially conical.

31. (Original) The bone plate of claim 20, wherein at least a portion of the bone-facing surface has a rough texture.

32. (Currently Amended) A method of fusing at least two bones, comprising:

selecting a bone plate according to claim 20;

forming a recess in the at least two bones capable of receiving the bone plate;

positioning the bone plate in the recess, such that the bone-facing surface of the bone plate adjoins bone; and

attaching joining the bone plate to the at least two bones using bone fasteners screws.

33. (Currently Amended) A bone plate for fusing plural bones that define a recess, comprising:

(A) a body portion configured to be received in the recess, ~~wherein the body portion and including includes a convex~~ bone-facing surface and a bone-opposing surface that opposes the bone-facing surface, the bone-facing surface being convex and being configured to adjoin at least one of the plural bones in the recess, and wherein, the body portion ~~defines~~ defining a plurality of openings, the plural openings extending between the bone-facing and bone-opposing surfaces, the plural

~~openings~~ being configured to receive bone fasteners that attach the body portion to the plural bones; and

(B) a cap configured to be coupled to the body portion and configured to obstruct out-of-bone movement of at least one of the bone fasteners after the at least one bone fastener has attached the body portion to at least one of the plural bones.

34. (Currently Amended) The bone plate of claim 33, wherein the plurality of openings further are configured to receive bone fasteners that compress the plural bones radially.

35. (Original) The bone plate of claim 33, wherein the cap is configured to be threadably engaged with the body portion.

36. (Original) The bone plate of claim 33, wherein the cap has a blocking portion configured to contact a head portion of the at least one bone fastener before the at least one bone fastener moves completely out of bone.

37. (Original) The bone plate of claim 33, the cap having a threaded portion joined to the blocking portion, wherein the threaded portion is configured to couple the cap to the body portion, the blocking portion and threaded portion each having a diameter, the diameter of the blocking portion being greater than the diameter of the threaded portion.

38. (Currently Amended) The bone plate of claim 33, the body portion having a central region, ~~the central region~~ defining a hole, wherein the cap is configured to be received in the hole ~~from the bone opposing surface~~ to couple the cap to the body portion.

39. (Original) The bone plate of claim 33, the cap being configured to obstruct out-of-bone movement for each of the bone fasteners.

40. (Currently Amended) A method of fusing at least two bones, comprising:

selecting a bone plate according to claim 33 [[32]];  
forming a recess in the at least two bones capable of receiving the bone plate;  
positioning the bone plate in the recess, such that the bone-facing surface of the bone plate adjoins the at least two bones;  
attaching joining the bone plate to the at least two bones using bone fasteners screws; and  
affixing the cap to the bone plate, such that out-of-bone movement of at least one of the bone fasteners screws is obstructed.